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REMARKS

Entry of the above Amendment and reconsideration of the application are respectfully requested under the provisions of 37 CFR 1.116. The above Amendment involves adding the features of base Claim 33 into base Claim 29, and thus no new issues are presented. Also, three new references were cited and applied in the latest Official Action, and it is believed the Applicant should have an opportunity to respond.

To briefly summarize, the present invention is directed to a light source, such as an incandescent lamp, which comprises a bulb 1, and a filament arranged in the bulb, with the filament being heated electrically so that it emits both visible light and heat radiation. To provide improved operating efficiency, a dielectric multilayer coating 7 is applied to the inner surface of the bulb, with the coating being designed to be spectrally selective so as to substantially reflect the heat radiation while being substantially transparent to the visible light. Further, to permit better absorption of the reflected heat radiation, the filament is configured to be in the form of a flat section, which is defined in the specification to include a broad surface which may be either planar or curved.

The fact that the filament is in the form of a flat section is an important aspect of the present invention, since the flat section provides significantly improved absorption of the reflected heat radiation, as compared to a filament with the conventional spiral form. This in turn leads to the highest possible backheating of the filament.

In rejecting the claims, the Examiner has proposed a combination of selected features of McGuire '017 and Noll '948. Figs. 19 and 20 of the McGuire patent disclose a lamp composed of a spiral filament 602 (note Fig. 19) which is

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positioned within an envelope 604. The envelope is coated at 620 to reflect the infrared energy back to the filament 602. McGuire does not disclose a filament which includes a flat section. For this feature, the Examiner has turned to the Noll patent which discloses a flat, "strip shaped" filament 15 which may be of a multi-layer design (column 5, lines 23-26), and the Examiner has proposed that the flat filament 15 of Noll could be substituted for the spiral filament 602 of McGuire.

It is submitted that such a substitution would not be feasible, since the configuration of the McGuire filament, and its placement within the lamp envelop 604, are critical to the desired operation of the lamp, note for example column 18, lines 34-46. Thus the proposed combination would likely destroy the desired operation, and one skilled in the art would not have attempted the combination.

Base Claim 29 now further recites that the filament comprises tantalum carbide, which may be in the form of a coating. Such material renders it possible to achieve during operation surface temperatures which are higher than is usual for a conventional tungsten filament, note page 5, lines 5-27 of the specification of the present application. To reject the subject matter of this claim, the Examiner has turned to the patent to Bird '284.

The Bird patent discloses a filament 30 composed of a core wire 32 and a helically wound fine wire 34, which are both formed of a material which comprises a major percentage of tantalum carbide. However, the disclosure of this patent is otherwise unrelated to a lamp with a flat filament and reflective surfaces as claimed, and there is no suggestion for this further modification of McGuire as proposed by the Examiner. Further, the fact that the Examiner has found it

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necessary to selectively pick and choose features from three prior patents in order to support his contention that the claimed invention is obvious, is itself strong evidence of the non-obviousness of the claimed invention.

In response to the rejection of Claim 42 under §112 of the patent statute, the questioned recitation has been deleted. The meaning of the language of the claim is now seen to be clear.

For the above reasons it is submitted that base Claim 29 clearly and patentably defines over the cited prior art, and that the base claim and its dependent claims are in condition for allowance. Reconsideration and allowance of the application is accordingly solicited.

Respectfully submitted,

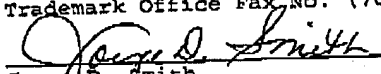


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